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MARSH, FISCHMANN & BREYFOGLE LLP 3151 SOUTH VAUGHN WAY SUITE 411 AURORA, CO 80014			PHILPOTT, JUSTIN M	
			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/843,082

Applicant(s)

NABKEL ET AL.

Examiner

Justin M. Philpott

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11, 15, 16, 20-35, 39, 40 and 44-53 is/are pending in the application.
- 4a) Of the above claim(s) 49-53 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 15, 16, 20-35, 39, 40 and 44-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 23, 2006 has been entered.

### ***Election/Restrictions***

2. Newly submitted claims 49-53 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: new claims 49-53 recite an invention comprising a particular service control message broker in communication with a plurality of service providers and transport association controllers, and an integrated service controller which maintains an event registration list and a message registration list relating to a plurality of services provided by the plurality of service providers, which is a distinct invention from that already claimed in pending claims 1-11, 15, 16, 20-35, 39, 40 and 44-48 which are directed to systems and methods for a distributed message broker which processes messages by relaying or screening means or steps.

3. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution

Art Unit: 2665

on the merits. Accordingly, claims 49-53 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### *Response to Arguments*

4. Applicant's arguments with respect to claims 1 and 25 have been considered but are moot in view of the new ground(s) of rejection. Specifically, the newly cited art teaches newly claimed limitations discussed in the following office action.

5. Additionally, since applicant's claims are replete with the phrasing of generally non-limiting language, "configured to", it is brought to applicant's attention that claim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure. See MPEP 2111.04. Accordingly, while applicant may argue that new limitations such as "configured to operate in a services control layer" (e.g., at claim 1, line 4) further limit applicant's claims, it is noted herein that a phrase such as "configured to operate in a service control layer" is *not* considered to be the same as the assertive, limiting language of "operates in a service control layer". Thus, even if applicant is not persuaded that the following prior art teaches each of applicant's newly or previously claimed limitations relating to "configured to" or similar language, it is noted herein that claim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed (such as "configured to"), or by claim language that does not limit a claim to a particular structure. See MPEP 2111.04.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 5-11, 25-27 and 29-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,633,899 to Coward in view of U.S. Patent No. 6,208,720 to Curtis et al.

Regarding claim 1, Coward teaches a system for providing exchange of messages and associated data across a plurality of communication network system entities for at least one communications network, comprising: at least one distributed message broker (e.g., broker 106, see FIGS. 1A and 1B and col. 3, line 56 – col. 4, line 10) connectable to the plurality of communication network system entities (e.g., configuration tool 102; and server 104) of at least one communication network (e.g., network comprising elements accessing a server, see col. 3, lines 25-55; see also col. 10, lines 30-47 regarding implementation in various other networks), wherein the at least one message broker (e.g., broker 106) is configured to provide message processing between a plurality of system entities (e.g., facilitating communications between the entities, see col. 3, line 56 – col. 4, line 10), wherein message processing includes at least one of: relaying (e.g., via updates, see col. 4, lines 11-45) and screening (e.g., determining if a user is registered as a ‘listener’ before providing updates, see col. 4, lines 45-50) based on prioritization rules of at least one of customer classification (e.g., user classified as a ‘listener’, see col. 4, lines 45-65), associated service classification (e.g., updates for time sensitive events, see col. 4, lines

Art Unit: 2665

51-65), and system entity classification (e.g., according to entity access list, see col. 4, line 66 – col. 5, line 9) applied to a message classification of one or more messages communicated over the at least one communications network between the plurality of system entities (e.g., see col. 4, line 11 – col. 6, line 44); and an integrated service controller ISC (e.g., processor in 1004, see FIG. 6) connectable with the message broker (e.g., see col. 10, lines 6-20 regarding broker being implemented within the system of FIG. 6); wherein the ISC (e.g., processor in 1004) is configured to classify, register, operate and prioritize a new service (e.g., configured to couple with RAM, ROM, network 1014 and I/O devices, see col. 10, lines 6-62, wherein 1004 inherently registers and operates new service such as new service with I/O devices or network 1014, and further, Examiner takes official notice that classification and prioritization are well known in the art to be performed by processors that are coupled with RAM and/or ROM in message service systems as in the message service system of Coward).

However, Coward may not specifically disclose the message broker is configured to operate in a service control layer.

Curtis, like Coward, also teaches a method for providing exchange of messages. Further, Curtis teaches message devices (e.g., 108, 110, 112, 114, 116, 118 in FIG. 1) are configured to operate in a services control layer (e.g., see col. 7, lines 1-67 and FIG. 1 regarding services control layer 107). Additionally, by having the message devices operating in a services control layer, Curtis provides a method for accommodating a variety of systems and accommodating a variety of services (e.g., see col. 7, lines 1-67). Furthermore, the overall teachings of Curtis provide a system with improved protection against fraud and a system which reduces losses (e.g., see col. 8, lines 3-22). Thus, at the time of the invention it would have been obvious to one of

Art Unit: 2665

ordinary skill in the art to look to the invention of Curtis for improving the method of Coward by providing a system with improved protection against fraud and a system which reduces losses (e.g., see col. 8, lines 3-22), and it would have been further obvious to one of ordinary skill in the art to operate the message exchange in Coward in a services control layer as done by Curtis in order to accommodate a variety of systems and accommodate a variety of services (e.g., see col. 7, lines 1-67).

Regarding claim 25, Coward teaches a method for providing exchange of messages and associated data across a plurality of communication network system entities for at least one communications network, comprising the steps of: configuring at least one message broker (e.g., broker 106, see FIGS. 1A and 1B and col. 3, line 56 – col. 4, line 10) to establish connections with a plurality of communication network system entities (e.g., configuration tool 102; and server 104) of at least one communications networks (e.g., network comprising elements accessing a server, see col. 3, lines 25-55; see also col. 10, lines 30-47 regarding implementation in various other networks); and receiving and processing one or more messages from the system entities wherein the processing includes at least one of: relaying (e.g., via updates, see col. 4, lines 11-45) and screening (e.g., determining if a user is registered as a ‘listener’ before providing updates, see col. 4, lines 45-50) based on prioritization rules of at least one of customer classification (e.g., user classified as a ‘listener’, see col. 4, lines 45-65), associated service classification (e.g., updates for time sensitive events, see col. 4, lines 51-65), and system entity classification (e.g., according to entity access list, see col. 4, line 66 – col. 5, line 9) applied to a message classification of one or more messages communicated over the at least one communications network between the plurality of system entities (e.g., see col. 4, line 11 – col.

Art Unit: 2665

6, line 44) ); and an integrated service controller ISC (e.g., processor in 1004, see FIG. 6) connectable with the message broker (e.g., see col. 10, lines 6-20 regarding broker being implemented within the system of FIG. 6); wherein the ISC (e.g., processor in 1004) is configured to classify, register, operate and prioritize a new service (e.g., configured to couple with RAM, ROM, network 1014 and I/O devices, see col. 10, lines 6-62, wherein 1004 inherently registers and operates new service such as new service with I/O devices or network 1014, and further, Examiner takes official notice that classification and prioritization are well known in the art to be performed by processors that are coupled with RAM and/or ROM in message service systems as in the message service system of Coward).

However, as discussed above regarding claim 1, Coward may not specifically disclose the message broker is configured in a service control layer.

Curtis, like Coward, also teaches a method for providing exchange of messages. Further, Curtis teaches message devices (e.g., 108, 110, 112, 114, 116, 118 in FIG. 1) are configured in a services control layer (e.g., see col. 7, lines 1-67 and FIG. 1 regarding services control layer 107). Additionally, by having the message devices operating in a services control layer, Curtis provides a method for accommodating a variety of systems and accommodating a variety of services (e.g., see col. 7, lines 1-67). Furthermore, the overall teachings of Curtis provide a system with improved protection against fraud and a system which reduces losses (e.g., see col. 8, lines 3-22). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to look to the invention of Curtis for improving the method of Coward by providing a system with improved protection against fraud and a system which reduces losses (e.g., see col. 8, lines 3-22), and it would have been further obvious to one of ordinary skill in the



Art Unit: 2665

art to configure the message exchange in Coward in a services control layer as done by Curtis in order to accommodate a variety of systems and accommodate a variety of services (e.g., see col. 7, lines 1-67).

Regarding claims 2 and 26, Coward teaches the plurality of system entities include a service management entity (e.g., server 104).

Regarding claims 3 and 27, Coward teaches message classification comprises message type (e.g., see col. 4, line 42 – col. 5, line 9 regarding time sensitive events and state of the installation process).

Regarding claims 5 and 29, Coward teaches the message broker (e.g., broker 106) is configured to employ message delivery parameters (e.g., errors, strings, status messages, etc., see col. 4, line 11 – col. 6, line 7, line 37) which affect the manner of delivery (e.g., whether message is broadcast to all users or only transmitted to users on the access list) for the one or more messages of a message classification between identified origination-destination endpoints (e.g., endpoints 102, 104, 116, 120, see FIG. 1B).

Regarding claims 6 and 30, Coward teaches the message delivery parameters include integrity of message delivery (e.g., updates including errors, see col. 5, lines 40-43).

Regarding claims 7, 8, 31 and 32, Coward teaches the message broker (e.g., broker 106) is configured to perform the message relay and screening prioritization of the one or more messages of a message classification based on static message operation rules (e.g., access list of the broker, see col. 4, line 42 – col. 5, line 39) comprising relationship definitions of associated message endpoints (e.g., comprising permitted or denied access to the state of the broker by the users 116, 120).

Regarding claims 9 and 33, Coward teaches the message broker (e.g., broker 106) is configured to perform dynamic prioritization for message relay and screening of the one or more messages of a message classification through communication with the system entities from which the one or more messages is generated or received (e.g., see col. 6, lines 25-44 regarding storing updated information on a periodic basis).

Regarding claims 10 and 34, Coward teaches the message broker (e.g., message broker 106) is further configured distribute messages including messages by which a serving system entity (e.g., server 104) advertises capabilities (e.g., via status and error messaging, see col. 5, line 40 – col. 6, line 24) and messages by which a client system entity (e.g., user 116, 120) identifies and obtains one or more references to methods associated with the serving system entity (e.g., server); and wherein the message broker (e.g., message broker 106) is further configured to distribute messages between the serving system entity (e.g., 104) and the client system entity (e.g., 116, 120) without an addressable reference (e.g., wherein broadcasting is performed, see col. 7, line 66 – col. 8, line 15).

Regarding claims 11 and 35, Coward teaches the message broker (e.g., broker 106) is configured to operate in a plurality of message distribution modes which include at least one of multicast (e.g., see col. 7, lines 1-13 regarding particular state changes only transmitted to designated users) and broadcast (e.g., see col. 8, lines 12-15 and col. 9, lines 3-10 regarding broadcasting messages).

Art Unit: 2665

8. Claims 4, 15, 16, 20-24, 28, 39, 40 and 44-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coward in view of Curtis, further in view of U.S Patent Application Publication No. 2002/0010776 A1 by Lerner.

Regarding claims 4 and 28, Coward in view of Curtis teaches the system and method discussed above regarding claims 1 and 25, however, may not specifically disclose relaying the one or more messages to an appropriate destination is based on at least one-high level name incorporated into the one or more messages. Lerner also teaches a message broker (e.g., message broker 390, see paragraphs 0041-0067 and FIG. 3) and specifically, teaches relaying one or more messages to an appropriate destination is based on at least one high-level name incorporated into the one or more messages (e.g., see paragraph 0034 regarding high-level functions of the data included in the messages, and paragraphs 0035-0037 which indicate respective location names are included in the messages). The teachings of Lerner provide accessing a plurality of remote applications with increased efficiency and reduced user response requirements (e.g., see paragraphs 0013-0018). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the message broker teachings of Lerner to the message broker system and method of Coward in view of Curtis in order to provide a user with access to a plurality of remote applications with increased efficiency and reduced user response requirements.

Regarding claims 15 and 39, Coward in view of Curtis teaches the system and method discussed above regarding claims 1 and 25, however, may not specifically disclose relaying the one or more messages to an appropriate destination is based on at least one-high level name incorporated into the one or more messages. Lerner also teaches a message broker (e.g.,

Art Unit: 2665

message broker 390, see paragraphs 0041-0067 and FIG. 3) and specifically, teaches the message broker (e.g., 390) is configured to relay or screen the one or more messages through the services control layer (e.g., interface layer 120) between the plurality of system entities located in at least one service layer (e.g., services layer 130) of the at least one communications network (e.g., see FIG. 1 and paragraphs 0026-0032). As discussed above, the teachings of Lerner provide accessing a plurality of remote applications with increased efficiency and reduced user response requirements (e.g., see paragraphs 0013-0018). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the message broker teachings of Lerner to the message broker system and method of Coward in view of Curtis in order to provide a user with access to a plurality of remote applications with increased efficiency and reduced user response requirements.

Regarding claims 16 and 40, Coward in view of Curtis in view of Lerner teach the system and method discussed above regarding claims 15 and 39. Further, Lerner teaches the message broker (e.g., message broker 390) is further configured to exchange the one or more messages with the integrated service controller (e.g., interface adapter which facilitates application integration, see paragraphs 0029) in the service control layer (e.g., interface layer 120, controlling services layer 130; see FIG. 1 and paragraphs 0026-0032) of the at least one communication network. As discussed above, the teachings of Lerner provide accessing a plurality of remote applications with increased efficiency and reduced user response requirements (e.g., see paragraphs 0013-0018). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the message broker teachings of Lerner to the message broker system and method of Coward in view of Curtis in order to provide a user

Art Unit: 2665

with access to a plurality of remote applications with increased efficiency and reduced user response requirements.

Regarding claims 20 and 44, Coward in view of Curtis in view of Lerner teach the system and method discussed above regarding claims 1 and 25. Further, Lerner teaches the message broker (e.g., message broker 390) is further configured to provide message translation for the one or more messages communicated between the plurality of communications domains (e.g., see paragraph 0027 regarding protocol translation of the messages). As discussed above, the teachings of Lerner provide accessing a plurality of remote applications with increased efficiency and reduced user response requirements (e.g., see paragraphs 0013-0018). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the message broker teachings of Lerner to the message broker system and method of Coward in view of Curtis in order to provide a user with access to a plurality of remote applications with increased efficiency and reduced user response requirements.

Regarding claims 21 and 45, Coward in view of Curtis in view of Lerner teach the system and method discussed above regarding claims 19 and 43. Further, Lerner teaches the message translation (e.g., see paragraph 0027 regarding protocol translation of the messages) includes messages translation schemes which are modular and configurable from a provisioning management system (e.g., see paragraph 0027 regarding interface layer 120 comprising the protocol translation between the application layer 110 hosted by a third party provider and services layer 130 comprising shared applications). As discussed above, the teachings of Lerner provide accessing a plurality of remote applications with increased efficiency and reduced user response requirements (e.g., see paragraphs 0013-0018). Thus, at the time of the invention it

Art Unit: 2665

would have been obvious to one of ordinary skill in the art to apply the message broker teachings of Lerner to the message broker system and method of Coward in view of Curtis in order to provide a user with access to a plurality of remote applications with increased efficiency and reduced user response requirements.

Regarding claims 22 and 46, Coward in view of Curtis in view of Lerner teach the system and method discussed above regarding claims 1 and 25. Further, Lerner teaches the message broker (e.g., message broker 390) is further configured to provide for authentication and authorization for the one or more messages exchanged between the plurality of domains (e.g., see paragraph 0003 regarding authentication/authorization server, and see paragraph 0027 regarding authentication process and registration process). As discussed above, the teachings of Lerner provide accessing a plurality of remote applications with increased efficiency and reduced user response requirements (e.g., see paragraphs 0013-0018). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the message broker teachings of Lerner to the message broker system and method of Coward in view of Curtis in order to provide a user with access to a plurality of remote applications with increased efficiency and reduced user response requirements.

Regarding claims 23 and 47, Coward in view of Curtis in view of Lerner teach the system and method discussed above regarding claims 1 and 25. Further, Lerner teaches the message broker (e.g., message broker 390) is further configured to provide message tunneling (e.g., see paragraph 0026 regarding protocol, formatting and other necessary transformations for messaging) for the one or more messages exchanged between the plurality of communications domains. As discussed above, the teachings of Lerner provide accessing a plurality of remote

Art Unit: 2665

applications with increased efficiency and reduced user response requirements (e.g., see paragraphs 0013-0018). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the message broker teachings of Lerner to the message broker system and method of Coward in view of Curtis in order to provide a user with access to a plurality of remote applications with increased efficiency and reduced user response requirements.

Regarding claims 24 and 48, Coward in view of Curtis in view of Lerner teach the system and method discussed above regarding claims 1 and 25. Further, Lerner teaches the message broker (e.g., message broker 390) is further configured to provide non-repudiation of message relay and screening in order to provide proof of message exchange transaction (e.g., see paragraph 0026 regarding returning any required results back to the calling application at the application layer 110 after performing necessary transformations). As discussed above, the teachings of Lerner provide accessing a plurality of remote applications with increased efficiency and reduced user response requirements (e.g., see paragraphs 0013-0018). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the message broker teachings of Lerner to the message broker system and method of Coward in view of Curtis in order to provide a user with access to a plurality of remote applications with increased efficiency and reduced user response requirements.

Art Unit: 2665

*Conclusion*

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M. Philpott whose telephone number is 571.272.3162. The examiner can normally be reached on M-F, 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on 571.272.3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Justin M Philpott



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